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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,723	06/30/2001	Thomas A. Hoch	HOCH 3-3-3	8724

7590 03/17/2005
Troutman, Sanders, Mays & Valentine
Attention: John Curtin, Esq.
Suite 600
1660 International Drive
McLean, VA 22102

EXAMINER

JUNG, MIN

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 03/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/896,723

Applicant(s)

HOCH ET AL. 

Examiner

Min Jung

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5-8, 13-16, 18, and 22-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 5-8, 13-16, and 22-25, it is not clear if "one or more higher-layer interfaces" are referring to the "one or more telecommunications higher-layer processors" recited in claims 1, 9, and 17, respectively.

In claim 18, step (D), it is not clear if the routing is from the higher-layer processor back to the same higher-layer processor, or it is routed to a layer higher than the higher-layer processor.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-8, 17, and 19-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Elliot et al., 6,587,470 (Elliot).

Elliot discloses flexible cross-connect architecture with a data plane.

Regarding claims 1-2, Elliot teaches a telecommunications apparatus comprising: a plurality of telecommunications SONET physical layer interfaces (SONET plane network interface subsystems 130, Fig. 1 and col. 5, lines 28-43), one or more telecommunications higher-layer processors (data plane network interface subsystems 140, Fig. 1, and col. 5, lines 44-52), and a digital cross-connect connected to route telecommunications traffic among the SONET physical layer interfaces and the one or more higher-layer processors (the cross-connect 120, Fig. 1, and col. 5, lines 24-28).

Regarding claims 3 and 4, Elliot further teaches ATM processor and IP processor because Elliot teaches that the data plane network signals include packet data transport formats such as ATM (col. 5, lines 56-58), and that the system handles traffic including ATM and Ethernet/IP traffic over SONET protocol (col. 7, lines 16-18), and also teaches signal processing at the data plane network subsystem (col. 5, lines 47-50).

Art Unit: 2663

Regarding claims 5-8, Elliot teaches 1:1 automatic protection switching and 1:N automatic protection switching for communications traffic from/to physical layer interfaces to/from higher-layer interfaces. See col. 3, lines 50-60, and col. 16.

Regarding claim 17, Elliot teaches receiving telecommunications traffic at a telecommunications physical interface; routing the received telecommunications traffic from the physical interface to a digital cross-connect; and routing the telecommunications traffic through the cross-connect to a telecommunications higher-layer processor. See col. 5, lines 24-52. Note that routing is an inherent step between the SONET plane network interfaces, the cross-connect, and the data plane network interface subsystems.

Regarding claims 19-23, the limitations correspond to that of claims 2-6, and therefore, the same reasons applied above applies to this group of claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9-16, 18, and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elliot.

Regarding claims 9, 18, and 24-25, Elliot fails to specifically teach a packet switch fabric connected to switch telecommunications traffic received at one or more of

Art Unit: 2663

the physical layer interfaces to one or more of the physical layer interfaces, and method including the steps of routing the communication through a packet switch. Elliot's teaching is limited to the cross-connect system shown in Fig. 1. However, it is obvious that the cross-connect system shown in Fig. 1 is not a stand-alone system, and is functional when used in a network environment. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to provide a packet switch to provide inter-connectivity between a plurality of cross-connect systems, and or between the cross connect system and other network switching/gating elements to provide a fully functional network system.

Regarding claims 10-16, the limitations are addressed above for claims 2-8. The reasoning for obviousness for this group of claims is the same as that addressed above for claim 9.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Sugawara et al. patent, the Ganor et al. patent, the Brolin et al. patent, the Fang et al. patent, the Tada patent, the Bavant et al. patent, and the Dantu et al. patent are cited for further references.

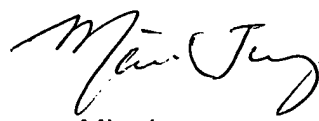
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Min Jung whose telephone number is 571-272-3127. The examiner can normally be reached on Monday, Thursday, Friday 7:30 - 6:00.

Art Unit: 2663

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJ
March 10, 2005


Min Jung
Primary Examiner